

Data Sheet | WAX610, WAX610Y Insight Managed WiFi 6 AX1800 Wireless Access Points



WiFi 6 Access Points for the Small and Medium Size Businesses

The WAX610 supports the next generation WiFi 6 smart phones, IoT devices, and notebook computers, delivering up to 40% more throughput to each individual device in the 5GHz band and 70% more throughput in the 2.4GHz band, compared to the previous generation equivalent model; provides 4x the client device connection, allowing businesses to serve more customers with better speed and less congestion.

The WAX610 is ideal in high density client device environments such as schools, hotels, restaurants and conference centers, and provides enterprise grade WiFi network security. With Insight management, WAX610 works seamlessly with your current NETGEAR Insight managed switches, WiFi access points and network storage, and is compatible with previous generation WiFi devices (WiFi 5 802.11ac for example) and WiFi Access Points.

Enjoy a 1-Year Insight subscription included with WAX610 and WAX610Y.

In the past several years, the WiFi industry has made progress in increasing speeds by leaps and bounds. However, capacity continues to be a challenge, namely, supporting a large number of concurrent users. This requirement is particularly acute for businesses, where very high throughput to each individual device may not be the paramount requirement. Rather, it is providing network connectivity to a large number of client devices, with good throughput, stable connection, and robust responses to environmental changes that is most important.

With the updated WiFi 6 (802.11ax) technology such as OFDMA, upstream and downstream MU-MIMO, and increased speeds, coverage, and capacity, you can feel confident that you're getting the highest performance WiFi that's set for years to come! Plus the assurance that you can now add more connected devices on your business WiFi network without any slowdowns or blind spots.

The WAX610, a WiFi 6 business access point, combined with Insight, helps small and medium businesses with an easy way to manage their network without an IT expert, providing great WiFi connection leaving each of their customers satisfied as a network user. NETGEAR empowers businesses with an all new WiFi 6 business access point for high performance and high coverage for the years to come.

The WAX610Y is the outdoor version of the WAX610. WAX610Y is waterproof and dust proof protected by a P2i nano-coating and meets the IP55 rating to withstand the rain and outdoor atmosphere.



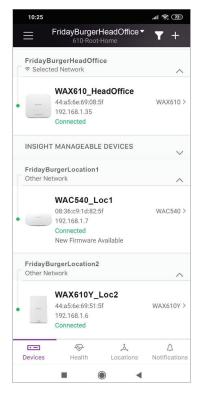
Business Features for higher speed, greater coverage and higher density WiFi

- Business class WiFi based on next generation 802.11ax WiFi 6 technology on both 5.0GHz and 2.4GHz bands. (Backward compatible to 802.11b/g/ n/a/ac)
- Dual band 2x2 (2.4GHz and 5.0GHz)
 4 streams of data for an aggregate throughput of up to 1.8Gbps
- Instant WiFi Mesh forming wireless backhaul with other WAX610, WAX610Y, WAC540 or WC564 units to form a WiFi mesh network
- 40% more throughput in 2-stream
 5.0GHz band and 70% more
 throughput in 2-stream 2.4GHz band
 compared to previous generation
- 4 times more client device supported

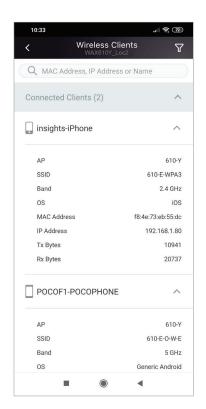
- Enterprise security and Enhanced Open security, such as WAP3, WPA Enterprise, 8x SSID and VLAN¹
- Basic Service Set Coloring (BSS Coloring) enabling significant improvement in radio frequency channel effeciency and reduction of interference
- Orthogonal Frequency Division Multiple Access (OFDMA) allowing simultaneous services to multiple devices in the same channel thus improving bandwidth efficiency and reducing latency
- 2.5GbE port, backward compatible with 100/1000Mbps Ethernet, supported by NETGEAR GSM4210P, MS510TXPP and other multi-gig Ethernet switches

- Target Wake Time (TWT) allows more efficient power usage resulting in longer battery life in WiFi 6 client devices
- Beamforming+; Advanced 6th generation WiFi technology such as up and downstream MU-MIMO
- One 802.3at 2.5Gbps PoE port.
 Remote management and monitoring
 from NETGEAR Insight app or Cloud
 portal for unrivaled management
 experience of your wireless network.
- App managed. Faster installation through NETGEAR Insight app or Cloud portal. No additional hardware needed.
- Market leading 5-year warranty with 24/7 chat support for peace of mind

¹ WPA Enterprise will be available in a future software upgrade.



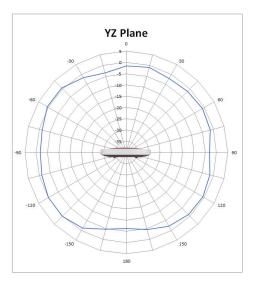


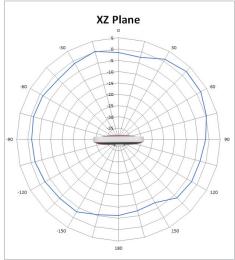


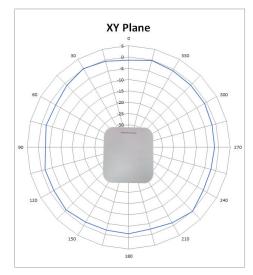


Radio Patterns for WAX610

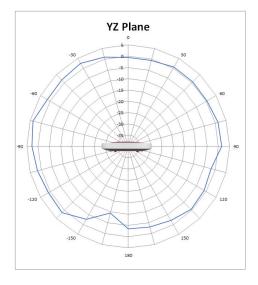
Radio Pattern for 2.4GHz

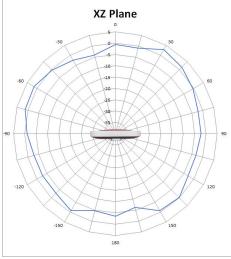


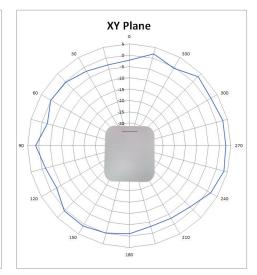




Radio Pattern for 5GHz



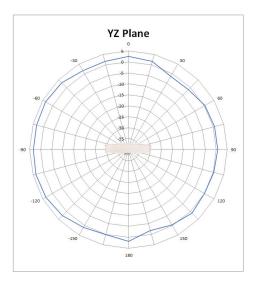


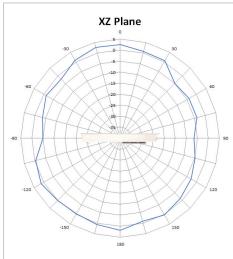


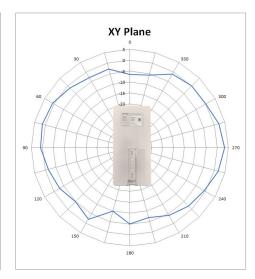


Radio Patterns for WAX610Y

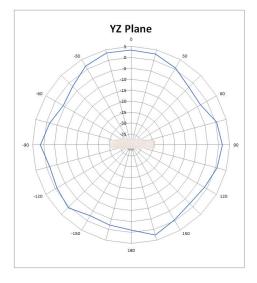
Radio Pattern for 2.4GHz

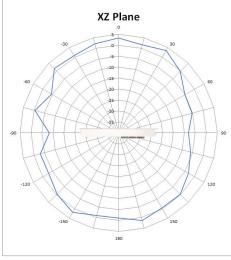


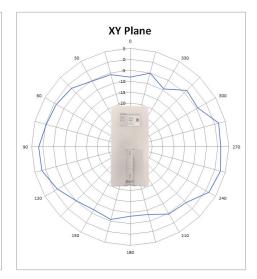




Radio Pattern for 5GHz



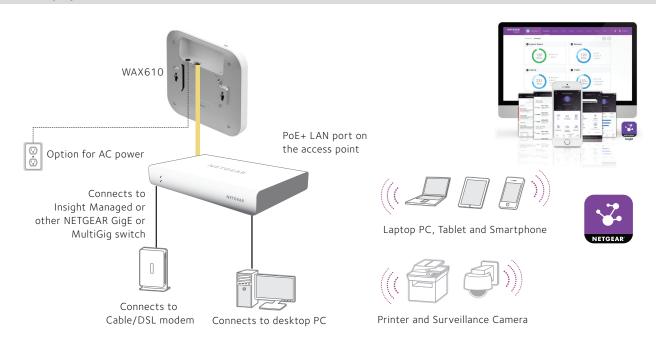






Example Application

WAX610 Deployment Scenario



WAX610Y Deployment Scenario





Product Comparison

Product Comparison	WAC505	WAC510	WAX610	WAX610Y
WiFi Standards	5.0GHz: 802.11a/n/ac 2.4GHz: 802.11b/g/n	5.0GHz: 802.11a/n/ac 2.4GHz: 802.11b/g/n	5.0GHz: 802.11a/n/ac/ax 2.4GHz: 802.11b/g/n/ax	5.0GHz: 802.11a/n/ac/a 2.4GHz: 802.11b/g/n/a:
Wireless Mode (Transmit x Receive)	2x2 in 5.0GHz 2x2 in 2.4GHz	2x2 in 5.0GHz 2x2 in 2.4GHz	2x2 in 5.0GHz 2x2 in 2.4GHz	2x2 in 5.0GHz 2x2 in 2.4GHz
OFDM/OFDMA	OFDM	OFDM	OFDM and OFDMA	OFDM and OFDMA
BSS Coloring	No	No	Yes	Yes
Multi-User MIMO	MU-MIMO	MU-MIMO	Bidir and MU-MIMO	Bidir and MU-MIMO
Target Wake Time (TWT)	No	No	Yes	Yes
Maximum Theoretical Throughput	AC1200 1.2Gbps	AC1300 1.3Gbps	AX1800 1.8Gbps	AX1800 1.8Gbps
Maximum Theoretical Throughput per Band	5.0GHz: 866Mbps 2.4GHz: 300Mbps	5.0GHz: 866Mbps 2.4GHz: 400Mbps	5.0GHz: 1200Mbps 2.4GHz: 600Mbps	5.0GHz: 1200Mbps 2.4GHz: 600Mbps
Antenna Gain	Internal 3/4dBi (2.4GHz/5GHz)	Internal 3/4dBi (2.4GHz/5GHz)	Internal 3.8/4.5dBi (2.4GHz/5GHz)	Internal 3.6/4.4dBi (2.4GHz/5GHz)
Power over Ethernet (PoE)	802.3at/af	802.3at/af	802.3at/af	802.3at/af
PoE Power Consumption	9W	9.3W	15.3W	16.1W
Centralized Management	Insight App	Insight App	Insight App	Insight App
Secure Socket Layer (SSL)	Yes	Yes	Yes	Yes
Router Mode	No	Yes	No	No
Wireless Distribution System (WDS)				
Repeater	Yes	Yes	Yes	Yes
Bridge Point-to-point/Multi-point	Yes	Yes	Yes	Yes
Simultaneous Bridge and Wireless Client Association	Yes	Yes	Yes	Yes
Security				
WiFi Protected Access (WPA/WPA2/WPA3), 802.11i	Yes	Yes	Yes	Yes
MAC address filtering with access control	Yes	Yes	Yes	Yes
802.1x RADIUS support with EAP TLS, TTLS, PEAP	Yes	Yes	Yes	Yes
Neighbor AP detection	Yes	Yes	Yes	Yes
Block SSID Broadcast	Yes	Yes	Yes	Yes
VLAN Support	Yes	Yes	Yes	Yes
Guest Network/Captive Portal	Yes	Yes	Yes	Yes
Bandwidth management	Yes	Yes	Yes	Yes
Link Layer Discovery Protocol	Yes	Yes	Yes	Yes
Bandsteering	Yes	Yes	Yes	Yes
Instant WiFi Mesh				
Wireless backhaul to form Mesh Network	No	No	Yes	Yes



Technical Specifications

Standards	WAX610	WAX610Y	
IEEE 802.11ax WiFi 6 standard	Yes	Yes	
WMM Wireless Multimedia Prioritization	Yes	Yes	
WDS Wireless Distribution System	Yes	Yes	
Power over Ethernet (PoE) IEEE 802.3af	Yes, approximately 60% of full throughput performance	Yes, approximately 60% of full throughput performance	
Power over Ethernet (PoE) IEEE 802.3at	Yes	Yes	
OFDM/OFDMA	Yes	Yes	
Physical Specifications			
Dimensions W x D x H	160.9 x 160.9 x 33.25 mm (6.33 x 6.33 x 1.30 in)	181 x 305 x 34 mm (7.12 x 12.0 x 1.33 in)	
Weight	412 g (0.90 lb)	940 g (2.07 lb)	
Environmental Specifications			
Operating temperature	0° to 40°C(32° to 104°F)	-10° to 50°C (10° to 122°F) (no solar radiation)	
Physical Interfaces			
Interface	One 100/1000/2.5GBASE-T Gigabit Ethernet (RJ-45) ports with Auto Uplink™ (Auto MDI-X) supporting IEEE 802.3af or 802.3at Power over Ethernet (PoE) One 100/1000/2.5GBASE-T Gigabit Ethernet (RJ-45) ports with Auto Uplink™ (Auto MDI-X) supporting IEEE 802.3af or 802.3at Power over Ethernet (PoE)		
Power adapter (not included)	12V DC, 2.5A; plug is localized to country of sale	Powered by PoE Only	
LED	Four (4): Power and Cloud connection; LAN speed; 2.4GHz status; 5.0GHz status	Four (4): Power and Cloud connection; LAN speed; 2.4GHz status; 5.0GHz status	
Security			
WiFi Protected Access® (WPA, WPA2, WPA3)	Yes		
WPA2 and WPA3 Enterprise	Yes		
Wireless access control to identify authorized wireless network devices	Yes		
MAC address authentication	Yes		
Network Management			
NETGEAR Insight App	App management for setup, monitoring and management		
Advanced Wireless			
Wireless Distribution System (WDS)	Bridge mode: Point-to-point wireless Bridge mode: Point-to-multipoint wireless Repeater mode Adjustable Transmit Power Control (TPC) Device detection		

Identify type of wireless clients in the network



Technical Specifications

Package Contents	WAX610	WAX610Y	
rackage contents	WAX610 Insight managed wireless access point Wall/ceiling mount kit Installation guide	WAX610Y Insight managed outdoor wireless access point Pole mount kit Wall/ceiling mount kit Installation guide	
Warranty and Support		3	
Hardware Limited Warranty	5 years	5 years	
Next-Business-Day (NBD) Replacement	5 years	5 years	
Technical support (online, phone)	90 days free from date of purchase*	90 days free from date of purchase*	
ProSUPPORT OnCall 24x7 Service Packs**	PMB0311-10000S PMB0331-10000S PMB0351-10000S	PMB0311-10000S PMB0331-10000S PMB0351-10000S	
Ordering Information			
WAX610-100EUS	Europe		
WAX610Y-100EUS (Outdoor version)	Europe		
WAX610-100NAS	US		
WAX610PA-100NAS	US (Power adapter included)		
WAX610Y-100NAS (Outdoor version)	US		
Power Adapters			
PAV12V-100AUS	Australia and New Zealand		
PAV12V-100EUS	Europe except UK		
PAV12V-100NAS	US and Canada		
PAV12V-100PRS	China		
PAV12V-100UKS	UK		

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^{*}This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and covers unmodified hardware, fans and internal power supplies - not software or external power supplies, and requires product registration using the Insight mobile app or Insight Cloud portal within 90 days of purchase; see https://www.netgear.com/about/warranty for details. Intended for indoor use only.

^{**}The NETGEAR OnCall 24x7 contract provides unlimited phone, chat and email technical support for your networking product.